

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 1, 12, 23-27 and 30 as indicated below (material to be inserted is in **bold and underline**, material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[]]):

Listing of Claims:

1. (Currently Amended) A system for identifying print media type in a media processing device, the system comprising:

a thermal energy source; and

a thermal energy sensor;

wherein the thermal energy source and thermal energy sensor are arranged along a media feed path so as to accommodate transfer of thermal energy to print media by the thermal energy source, diffusion of such thermal energy, subsequent sensing of such diffused thermal energy to determine a heat capacity of the print media, and identification of a media weight particular print media type of the print media based on the heat capacity of the print media.

2. (Previously Presented) The system of claim 1, wherein the thermal energy source and the thermal energy sensor are oriented in the line parallel with a media feed path, the thermal energy sensor being downstream from the thermal energy source.

3. (Original) The processing device of claim 1, wherein the thermal energy source is a heat source.

4. (Original) The system of claim 1, further comprising a shield disposed about the thermal energy source so as to direct thermal energy generated by the thermal energy source toward the feed path.

5. (Original) The system of claim 1, further comprising a shield disposed about the thermal energy sensor to direct heat radiated from the feed path toward the thermal energy sensor.

6. (Original) The system of claim 1, wherein the thermal energy source includes an infrared heat source.

7. (Previously Presented) The system of claim 1, wherein the thermal energy sensor includes at least one of a thermocouple device, a semiconductor device, a polyvinylidene fluoride sensor, and a passive infrared sensor.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Currently Amended) A media processing device comprising:

a media feed mechanism configured to pass print media downstream along a media feed path;

a heat source disposed along the feed path to heat print media passing downstream along the media feed path;

a temperature sensor disposed along the feed path downstream from the heat source, the temperature sensor being configured to sense temperature of print media passing downstream from the heat source;

a processor coupled with the temperature sensor to selectively identify media weight ~~print media type~~ based on sensed temperature of the print media as compared to a reference temperature.

13. (Canceled)

14. (Canceled)

15. (Original) The media processing device of claim 12, wherein the media processing device is a printer.

16. (Original) The media processing device of claim 12, wherein the heat source is an infrared heat source.

17. (Previously Presented) The media processing device of claim 12, wherein the temperature sensor includes at least one of a thermocouple device, a semiconductor device, a polyvinyldene fluoride film device, and a passive infrared sensor.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Original) The media processing device of claim 12, further comprising:

a first shield disposed around the heat source; and

a second shield disposed around the temperature sensor;

wherein the first shield directs thermal energy from the heat source toward the

feed path and the second shield directs thermal energy from the feed path toward the temperature sensor.

22. (Canceled)

23. (Currently Amended) A media processing device comprising:

a media feed mechanism configured to pass print media downstream along a media feed path;

a heat source disposed along the feed path to heat print media passing downstream along the media feed path;

a temperature sensor disposed along the feed path downstream from the heat source, the temperature sensor being configured to sense temperature of print media passing downstream from the heat source;

a processor coupled with the temperature sensor to selectively identify media weight ~~print media type~~ based on sensed temperature of the print media; and

a keyed shield interposed the temperature sensor and the feed path to selectively periodically shield the temperature sensor from thermal energy radiated by media passing downstream from the heat source, whereby such periodically shielded sensing produces a waveform representative of heat capacity of the print media.

24. (Currently Amended) The media processing device of claim 23, wherein the processor is configured to receive the waveform representative of heat capacity of the media, and from such heat capacity to determine media weight type.

25. (Currently Amended) The media processing device of claim 12, wherein the processor is configured to modify toner fuser speed based on media weight ~~print media type~~.

26. (Currently Amended) A method of determining print media type, the method comprising:

applying thermal energy to print media to define heated and unheated patches of print media;

feeding the print media downstream along a media feed path;

sensing thermal energy radiated from the heated and unheated patches of print media;

calculating a heat capacity of the print media based on the thermal energy radiated from the heated and unheated patches of print media; and

identifying a media weight ~~particular print media type~~ of the print media based on the heat capacity of the print media.

27. (Currently Amended) A method of determining media type, the method comprising:

applying thermal energy to print media;

feeding the print media downstream along a media feed path;

determining a media temperature by sensing thermal energy radiated from the print media;

determining a reference temperature by sensing thermal energy radiated from a reference surface;

determining a heat capacity of the print media by comparing the media temperature with the reference temperature; and

identifying a media weight ~~particular print media type~~ of the print media based on the heat capacity of the print media.

28. (Canceled)

29. (Canceled)

30. (Currently Amended) A media processing device comprising:

media feed means configured to pass print media downstream along a media feed path;

heating means disposed along the feed path for applying thermal energy to print media passing downstream along the media feed path;

temperature-sensing means disposed along the feed path downstream from the heat source for selectively sensing temperature of print media passing downstream from the heating means;

a processor means coupled with the temperature-sensing means for receiving an output representative of the sensed temperature, determining heat capacity of the print media based on such output, and identifying a media weight particular print media type of the print media based on such heat capacity.

31. (Original) The media processing device of claim 30, which further comprises reference means for determining ambient temperature, the processor means being configured to determine heat capacity based on a comparison between such ambient temperature and such sensed temperature.

32. (Canceled)